

corresponding groove in an inner surface of a repair ring shaped to fit around the instrument. Hot melt adhesive is then introduced into the groove in the instrument and onto adjacent surfaces of the instrument. The ring is then joined to the instrument such that the grooves are facing one another. The adhesive is then heated into a melted state.

When the adhesive cools and cures it provides both an adhesive bond between the parts and a mechanical lock against shear forces where it has dried within the facing grooves. The Nagao patent does not disclose how the instrument is grooved or how the adhesive is applied.

### REMARKS

Claims 1-11 remain in the application.

The applicant has amended the Background of the Invention to more accurately set forth the Nagao patent disclosure.

The office action maintains its rejection of claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art on pages 1-3 of the specification in view of Henzl or Reid, Jr. et al.

Regarding claim 1, in the applicant's previous response, the applicant argued that neither the admitted prior art nor Reid, Jr. et al. disclose forming a recess in the mating surface of an existing part and that Reid, Jr. et al. disclose, instead, the extrusion of an elongated part through an extension die shaped to form elongated recesses in the part as the part is being extruded.

The office action counters this argument by stating that the admitted prior art teaches forming a recess after providing a first part. The office action does not specify, so the applicant can only assume, that the office action is referring to the Nagao patent's disclosure of forming a groove in an outer circumferential surface of a hollow woodwind musical instrument body and forming a corresponding groove in an

inner circumferential surface of a ring that is shaped to encircle the body. However, Nagao does not disclose or suggest forming a recess in the mating surface of a first vehicle trim part (after providing the trim part) as claimed. Instead, Nagao discloses forming a recess in the body of a musical instrument. Neither does Nagao disclose or suggest forming a mechanical lock by filling the recess with material that will form a second part to be attached. Instead, Nagao discloses filling the recess with glue used to affix a second part to be attached. The use of a recess to house adhesive teaches away from the use of a recess to form a mechanical interface by receiving and holding material from a second part to be attached to the first part.

*Argument directed to AF 2002 570 p. 102. 2/15/02*

In the applicant's previous response, the applicant argued that neither the admitted prior art nor Reid, Jr. et al disclose providing a buffer material in a recess to provide a bead of buffer material and that, instead, Reid, Jr. et al disclose a co-extrusion process that forms a pair of trim strips joined together in a mechanically interlocked configuration. According to the office action, this limitation (providing buffer material in a recess to form a bead) is taught "by the combination of the admitted prior art and Henzl or Reid, Jr. et al." However, the office action does not explain what elements it would have been obvious to combine from each reference, how those elements would be combined, or what the suggestion or incentive would have been to do so. The previous office action states only that it would have been obvious to apply the mechanical bond formation methods disclosed in either Henzl or Reid, Jr. et al to the admitted prior art to overcome the problem of bonding elastomer to the various materials of automotive interior trim.

However, the mechanical bond formation method of Henzl includes the formation of recesses in a first layer of material as that layer of material is being molded and the formation of a coextensive second layer of material on the first layer of material. The method also includes forcing the second layer of material into a predetermined shape defined by a complementary shaped mold rather than forming a "bead" of material. Applying these steps to the "admitted prior art" would not arrive at the method of claim 1 because it would not provide the process steps of providing

buffer material in an existing recess in a trim part to provide a bead of buffer material on a mating surface of the trim part. Therefore, claim 1 and dependent claims 2-11 are patentable over the admitted prior art in view of Henzl.

*an admission  
is a base*

The mechanical bond formation method of Reid, Jr. et al includes the extrusion of an elongated part through an extension die shaped to form elongated recesses in the part as it is being extruded. Reid, Jr. et al also disclose a co-extrusion process that forms a pair of trim strips together in a mechanically interlocked configuration. Applying these steps to the "admitted prior art" would not arrive at the method of claim 1 because it would not provide the step of providing buffer material in an existing recess in a trim part to provide a bead of buffer material on a mating surface of the trim part. Therefore, claim 1 and dependent claims 2-11 are patentable over the admitted prior art in view of Reid, Jr. et al.

Regarding claim 2, nothing in the prior art of record discloses or suggests the formation of an undercut recess used to mechanically lock a bead of buffer material to the edge of a trim piece. For this reason, and because claim 2 depends from an allowable base claim, claim 2 patentably defines over the admitted prior art in view of Henzl or Reid, Jr. et al.

*admission*

In addition, the applicant maintains that Nagao is not analogous art and is therefore not within the scope and content of the prior art as required by 35 U.S.C. 103(a). The inventor's field of endeavor is interior automotive trim design. In contrast, Nagao relates to a method for repairing old woodwind instruments. The particular problem that the inventor was involved in was finding a way to support relatively soft, noise-reducing buffer material between independently-supported adjacent automotive trim pieces. In contrast, the Nagao method addresses the problem of how rigidly attach hard metallic repair rings around hollow, cracking woodwind instrument bodies.

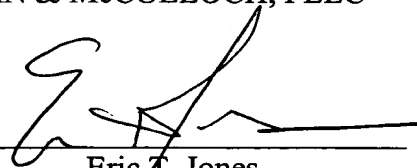
Nagao discloses forming a groove around an instrument body and a corresponding groove within a repair ring. The grooves together form a torroidal chamber for holding an adhesive that securely glues the ring to the body. While awareness of such a method might suggest, to one of ordinary skill in the automotive trim art, a new method of holding glue between adjacent trim pieces to improve bond strength between the trim pieces, it would not suggest a method of supporting and mechanically retaining a bead of buffer material on the edge of a trim piece to reduce noise generated by rubbing with an adjacent trim strip that is independently supported.

Please enter the amendments under the provisions of 37 CFR §1.116 and reconsider claims 1-11 in view of the foregoing amendments and remarks.

I authorize the Assistant Commissioner to charge any deficiencies, or credit any overpayment associated with this communication to Deposit Account No. 50-0852

Respectfully submitted,

REISING, ETHINGTON, BARNES, KISSELLE,  
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Date: March 16, 2001



**"RESPONSE UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE  
EXAMINING GROUP 1732"**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application:  
Josh Kelman et al.

Serial No.: 09/322,585

Group Art Unit: 1732

Filed: May 28, 1999

Examiner: E. Lee

For: METHOD FOR APPLYING BSR ELASTOMER

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D. C. 20231, on March 16, 2001.

  
Henrietta Mehling

**MARKED UP COPY OF AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Pursuant to the requirements of 37 C.F.R. § 1.12(c)(ii), the following is a marked up copy of the response submitted in the accompanying AMENDMENT AND RESPONSE being filed herewith.

**IN THE BACKGROUND:**

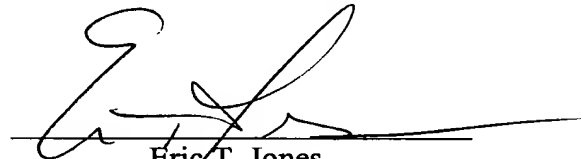
Please amend the paragraph at lines 16-28 of page 2 as follows: It is known to augment the holding power of hot melt adhesives by applying such adhesives to **[an undercut] a** groove in such a way as to form a mechanical as well as an adhesive bond **between adjacent parts**. For example, United States Patent number 3,635,117 issued to Nagao on January 18, 1972 discloses a method for fixing a woodwind instrument. The method includes the step of forming **[an undercut] a** groove in **[a first part] an**

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outer surface of the instrument [to be joined to a second part of the instrument] and a corresponding groove in an inner surface of a repair ring shaped to fit around the instrument. Hot melt adhesive is then introduced into the [undercut] groove in the instrument and onto adjacent surfaces of the [first part of the] instrument. The [second part of the instrument] ring is then joined to the [first part of the] instrument [with the hot melt adhesive sandwiched between] such that the grooves are facing one another. The adhesive is then heated into a melted state. When the adhesive cools and cures it provides both an adhesive bond between the parts and a mechanical lock against shear forces where it has dried within the [undercut region of the groove] facing grooves. The Nagao patent does not disclose how the [first part] instrument is grooved [and undercut] or how the adhesive is applied.

Respectfully submitted,

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